

Date: Tuesday, 12/05/2009 1:37:20 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : TUBE
Job Number : 47917	
Estimate Number : 12171	
P.O. Number :	Part Number : D34767
This Issue : 12/05/2009 S.O. No. :	Drawing Number : D3476 REV.B
Prsht Rev. : NC	Project Number : N/A
First Issue : // Type : SMALL /MED FAB	Drawing Revision : B
Previous Run : 45337	Material :
Written By :	Due Date : 19/05/2009
Checked & Approved By : <u>JUL 09 05 12</u>	Qty: 40 ²⁰ Um: Each
Comment : Est Rev:A New Issue 06-02-03 JLM	
Est Rev:B 09-02-17 rev.b as per dwg DD verified by:EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S26GA	304/316 0.018 SHEET
-----	-----------	---------------------



Comment: Qty.: 0.1072 sf(s)/Unit Total : 1.0721 sf(s)

Pick:

304/316 0.018 SHEET

(M304S26GA)

Batch: M109398

EP 09/05/14

2.0	SHEAR	SHEAR
-----	-------	-------



Comment: SHEAR

Cut Flat pattern as per Dwg D3476

EP 09/05/14

3.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr

2-Roll as per Dwg D3476

3-Spot Weld as per Dwg D3476 and Dart QSI 018

4-Form Bead as per Dwg D3476 Using Rotary Machine.

FF 09-05-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 12/05/2009 1:37:20 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE

Job Number: 47917

Part Number: D34767

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

4.0

QC11

VISUAL INSPECTION OF SPOT WELDING



Comment: VISUAL INSPECTION OF SPOT WELDING

SB 09/05/25 (20)

5.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 09/05/25 (20) center

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 168

88 09/05/25 (20)

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/05/26

Job Completion



MF 09-05-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

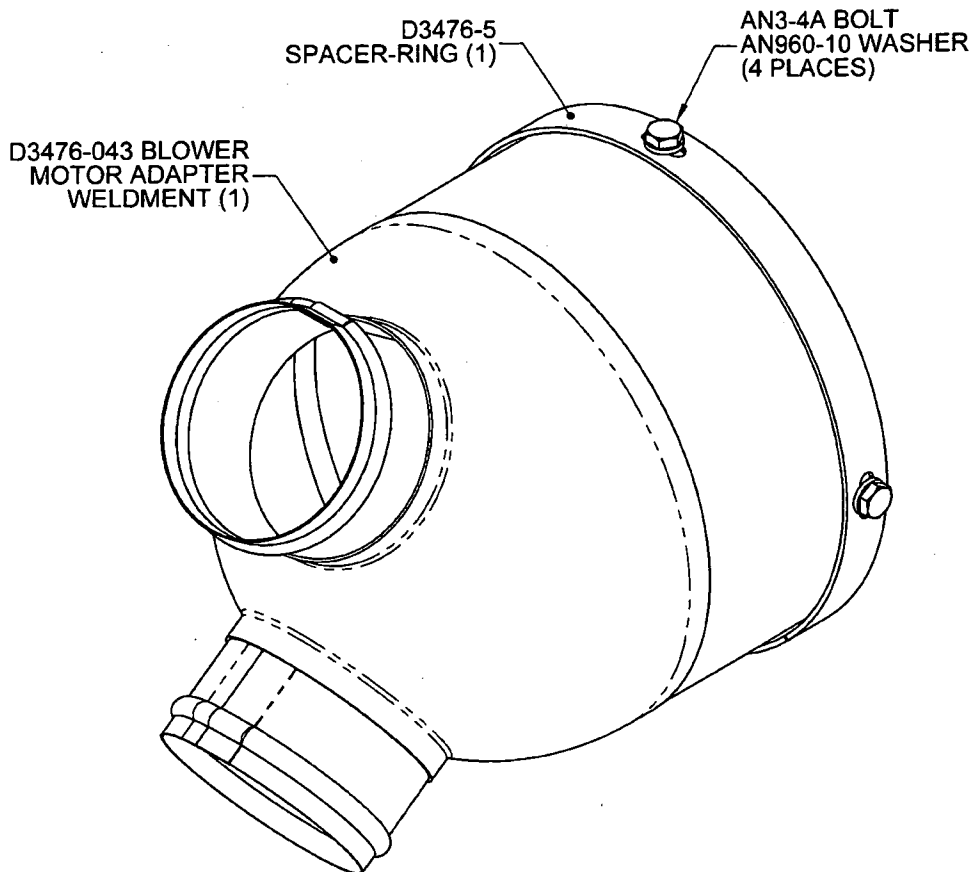
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3476	REV. B SHEET 1 OF 7
DATE 08.12.19		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2
A	06.01.27	NEW ISSUE	
B	08.12.19	ADD TOL & NOTE SHT3/7; REDESIGN -1F; MATL SPEC WAS MIL-S-5019	



D3476-041 BLOWER MOTOR ADAPTER

- 1) IDENTIFY WITH DART P/N D3476-041 USING FINE POINT PERMANENT INK MARKER

QTY -041	P/N	DESCRIPTION
X	D3476-041	BLOWER MOTOR ADAPTER
1	D3476-043	BLOWER MOTOR ADAPTER WELDMENT
1	D3476-5	SPACER-RING
4	AN3-4A	BOLT
4	AN960-10	WASHER

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

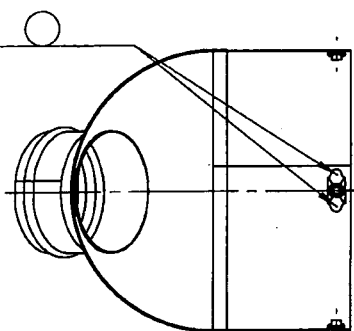
NOTE: Date & initial all entries



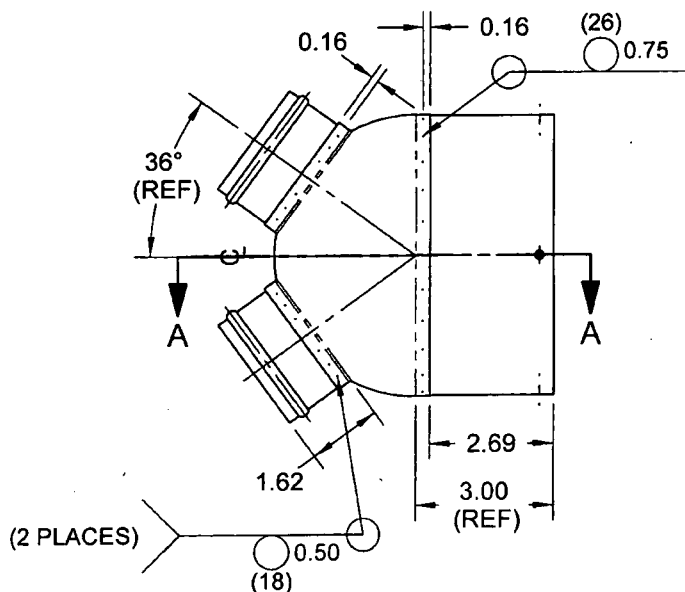
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CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3476	REV. B SHEET 2 OF 7
DATE 08.12.19	TITLE BLOWER MOTOR ADAPTER		SCALE 1:4

RELEASED
3/21/2014

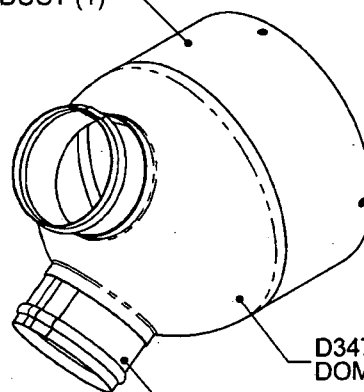
LOCATE AND
SPOT WELD
NUT PLATES
(4 PLACES)



SECTION A-A



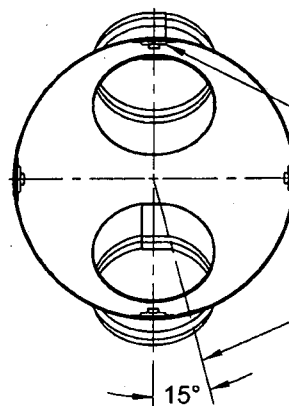
D3476-1
DUCT (1)



D3476-3
DOME (1)

D3476-7 TUBE
(2 PLACES)

NAS-1031C3W
NUT PLATES
(4 PLACES)



OFFSET SEAM
ON DUCT

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NO. 47917

D3476-043 BLOWER MOTOR ADAPTER WELDMENT

NOTES:

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) PART IS SYMETRICAL ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -043	P/N	DESCRIPTION
X	D3476-043	BLOWER MOTOR ADAPTER WELDMENT
1	D3476-1	DUCT
1	D3476-3	DOME
2	D3476-7	TUBE
4	NAS1031C3W	NUTPLATE

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

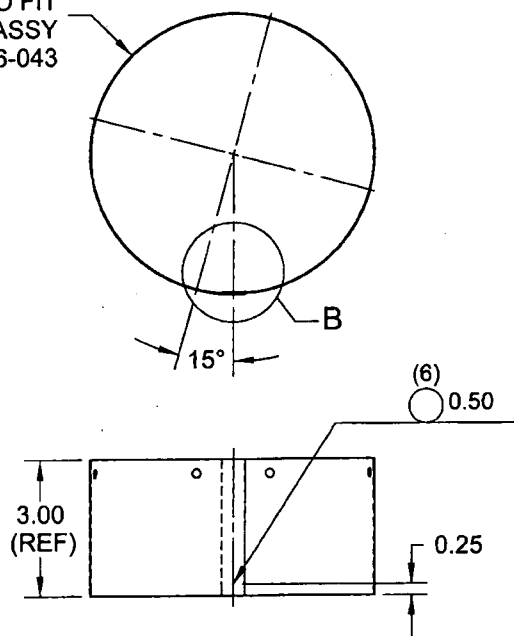
NOTE: Date & initial all entries



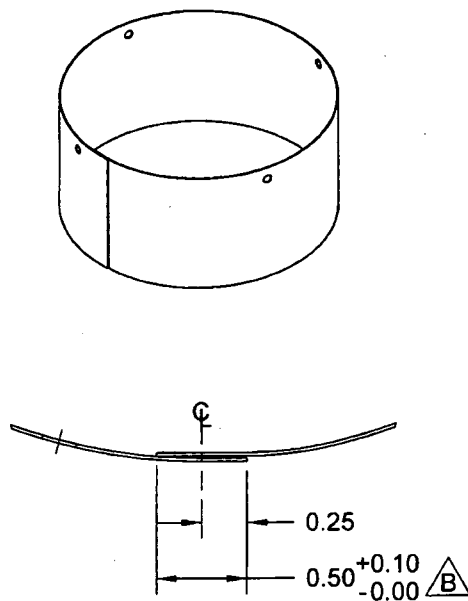
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DATE 08.12.19		TITLE BLOWER MOTOR ADAPTER	SCALE 1:4

RELEASED
08/21/20 NY

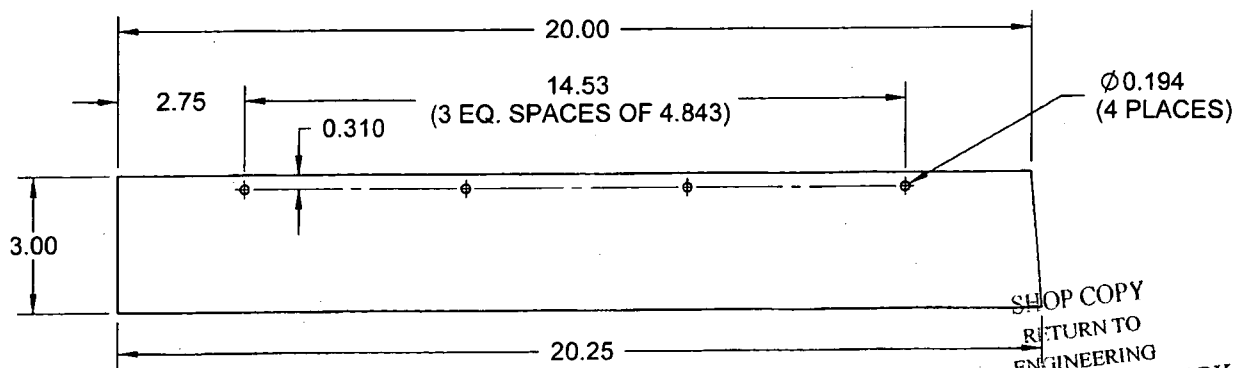
△ B $\varnothing 6.16$ (REF)
FORM TO FIT
D3476-3 AT ASSY
OF D3476-043



D3476-1 DUCT



DETAIL B
SCALE 1:1



△ B **D3476-1F DUCT FLAT PATTERN**

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISH
OR AMS 5513/5524, 26 GAUGE SS (0.018 THICK)
(REF. DART SPEC. M304S26GA)
- 2) SPOT WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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△ B

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

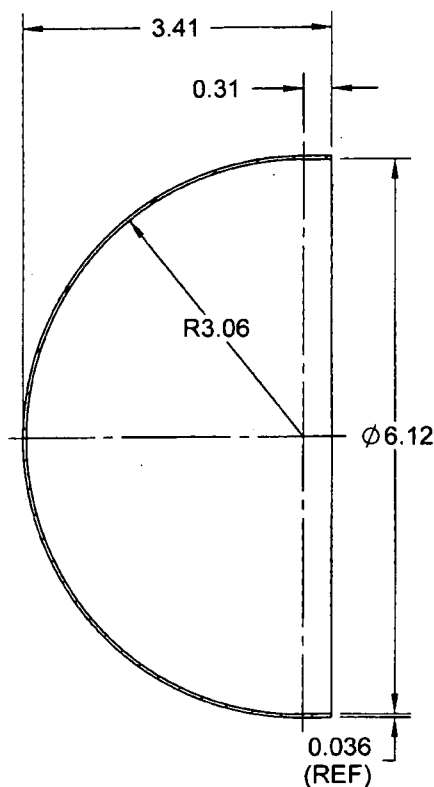
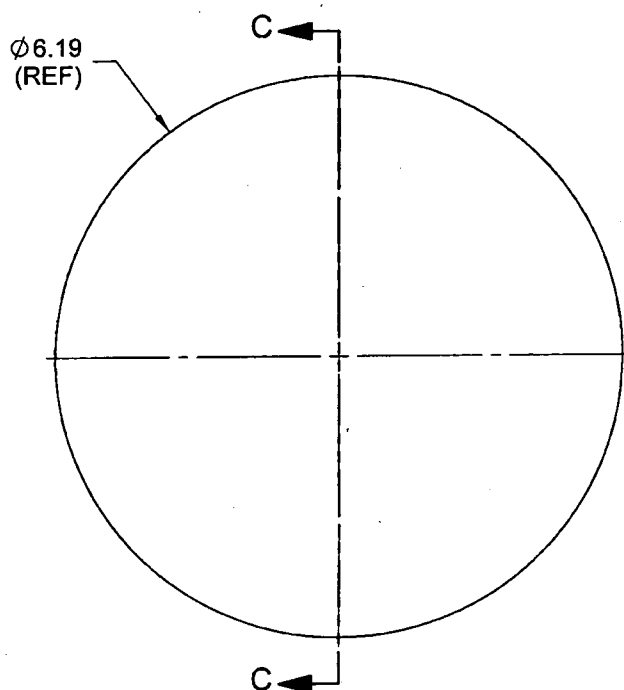
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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DATE 08.12.19		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2

RELEASED
9/11/2017



SECTION C-C

D3476-3S DOME, SPINNING DETAIL

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.036 THICK PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524 (REF. DART SPEC. M304S20GA)
- 2) FORM BY SPINNING TO DIMENSION WITHOUT EXCESS THINNING OF MATERIAL (MINIMUM THICKNESS = 0.025").
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

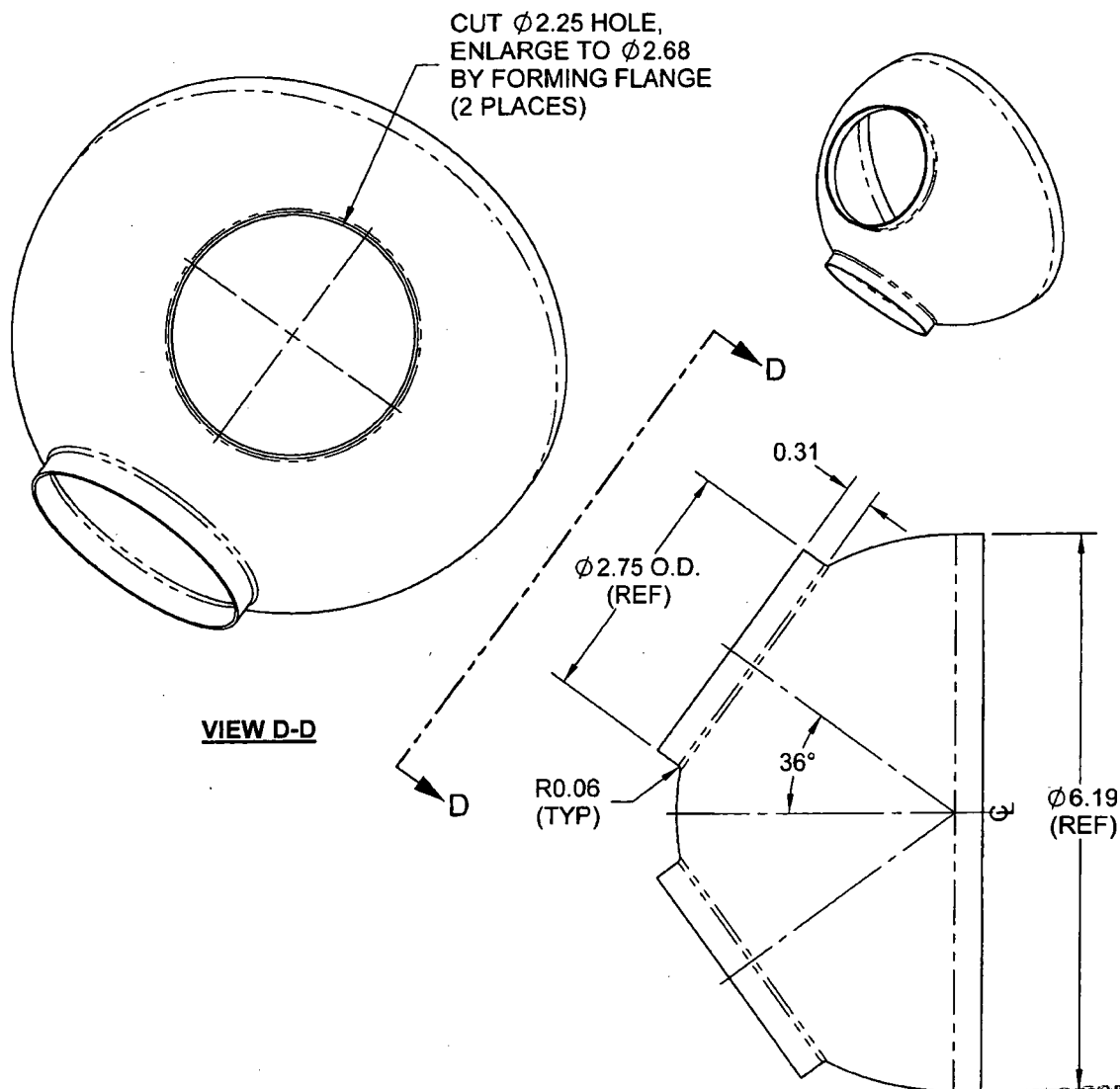
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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DATE 08.12.19		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2

RELEASED
9/2/30 M**D3476-3 DOME****NOTES:**

- 1) MATERIAL: MAKE FROM D3476-3S
- 2) FINISH: NONE
- 3) PART IS SYMMETRICAL ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

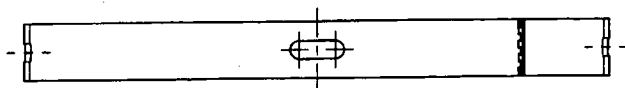
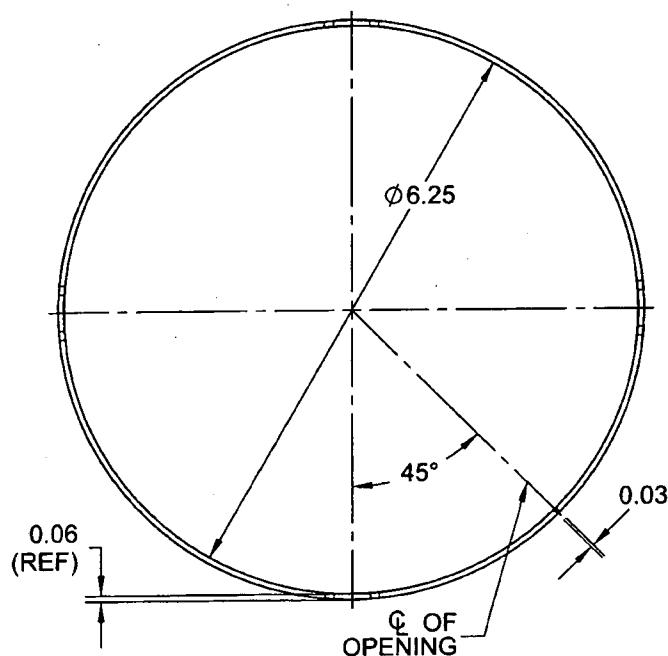
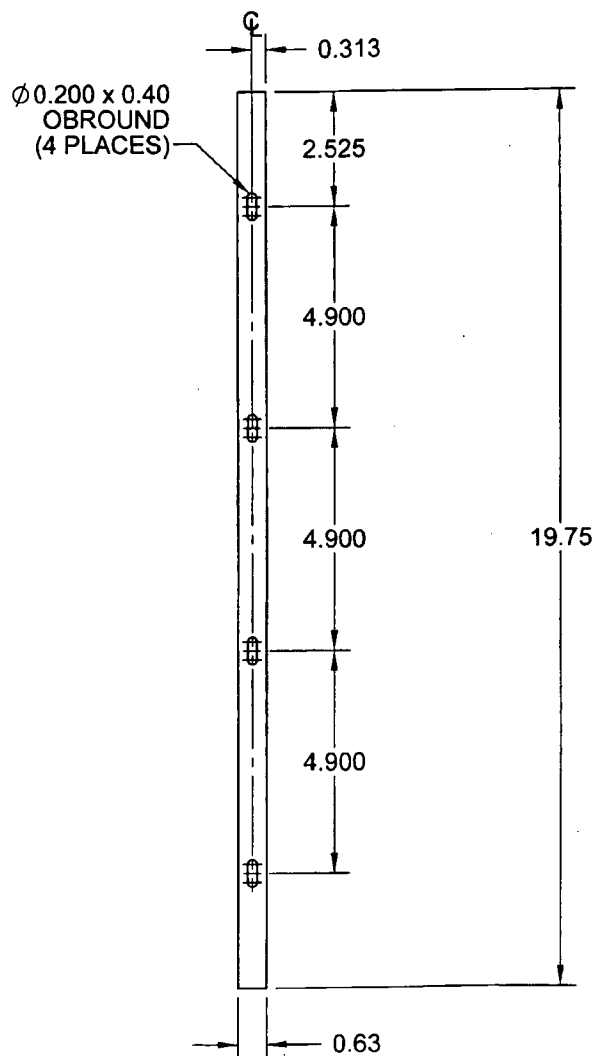
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3476	REV. B SHEET 6 OF 7
DATE 08.12.19		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2

RELEASED
[Handwritten: 9/10/30 MB]**D3476-5 SPACER-RING****D3476-5F SPACER-RING
FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.063 THICK, PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524 (REF. DART SPEC. M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

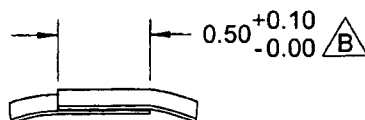
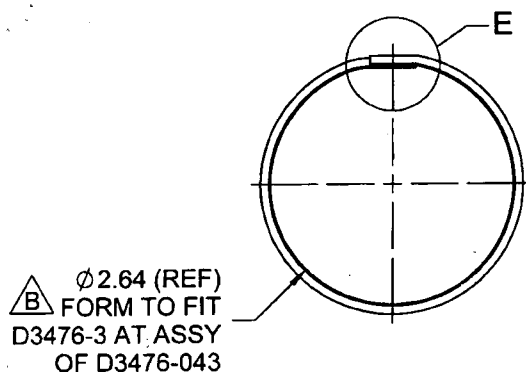
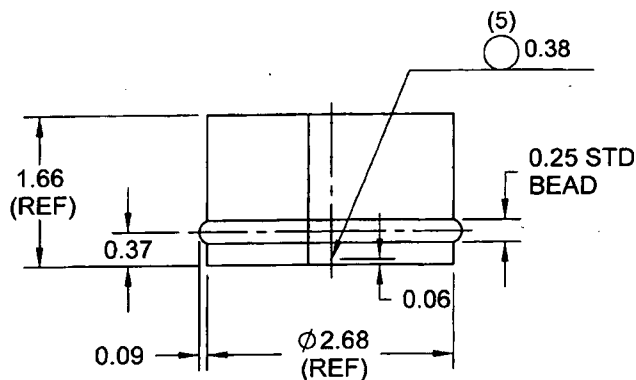
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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DATE 08.12.19		TITLE BLOWER MOTOR ADAPTER	SCALE 1:2

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[Signature]



DETAIL E
SCALE 1:1

D3476-7 TUBE

D3476-7 TUBE
FLAT PATTERN

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NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524, 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) SPOT WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SPOT WELD TEST RECORD

AMS-W-6858A

CLASS 'C'

TEST NO#: 66

EMPLOYEE: Klaus Franken

PART NUMBER: D3476-7

JOB NUMBER: 47917

MATERIAL TYPE: 304 L

MATERIAL THICKNESS: 2664

GROUP SPECIFICATION



Group 1: Aluminum & magnesium



Group 2: Iron; nickel; cobalt



Group 3: Titanium SS

TEST RESULTS

	PASS	FAIL
VISUAL:	[<u>/</u>]	[]
PENETRATION:	[<u>/</u>]	[]
PULL STRENGTH:	[<u>/</u>]	[]

PSI Reading: _____

Qualified in accordance with standard AMS-W-6858A and QSI 004 (ref: 4.3)

DATE OF TEST COUPON: 09/05/25

QUALIFIER: SB